

## ABSTRAK

Siti Khoirun Annisak. **PENGARUH PENERAPAN MODEL PEMBELAJARAN *CONSTRUCTIVE CONTROVERSY* DAN INKUIRI TERBIMBING SESUAI REPRESENTASI TETRAHEDRAL KIMIA TERHADAP PRESTASI BELAJAR KIMIA DITINJAU DARI KEMAMPUAN BERPIKIR KRITIS (Pembelajaran Kimia Materi Kelarutan dan Hasil Kali Kelarutan)**. Skripsi, Fakultas Keguruan dan Ilmu Pendidikan Universitas Sebelas Maret Surakarta. Juli 2018.

Materi kimia kelarutan dan hasil kali kelarutan merupakan salah satu materi yang sulit sehingga dibutuhkan kemampuan berpikir kritis. Inovasi pembelajaran untuk meningkatkan kemampuan berpikir kritis sangat penting. Penelitian ini bertujuan untuk mengetahui : (1) pengaruh penerapan model pembelajaran *Constructive Controversy* (CC) dan inkuiri terbimbing berdasarkan representasi tetrahedral kimia terhadap prestasi belajar siswa pada materi kelarutan dan hasil kali kelarutan; (2) pengaruh kemampuan berpikir kritis siswa terhadap prestasi belajar siswa pada materi kelarutan dan hasil kali kelarutan; (3) interaksi antara penerapan model pembelajaran CC dan inkuiri terbimbing berdasarkan representasi tetrahedral kimia dengan kemampuan berpikir kritis terhadap prestasi belajar siswa pada materi kelarutan dan hasil kali kelarutan.

Penelitian ini menggunakan metode eksperimen semu dengan desain faktorial 2x2. Sampel penelitian adalah siswa kelas XI MIA 2 dan XI MIA 4 SMA Negeri 1 Sragen yang diambil dengan teknik *cluster random sampling*. Teknik pengumpulan data menggunakan : (1) instrumen tes berpikir kritis dan aspek pengetahuan; (2) angket untuk mengukur prestasi sikap; dan (3) observasi untuk mengukur aspek sikap, ketrampilan, dan penerapan tetrahedral kimia. Analisis data menggunakan uji statistik parametrik ANAVA dan non parametrik *Kruskal Wallis* dengan bantuan *software* SPSS 20.

Hasil penelitian menunjukkan bahwa: (1) tidak ada pengaruh penerapan model pembelajaran CC dan inkuiri terbimbing berdasarkan representasi tetrahedral kimia terhadap prestasi belajar aspek pengetahuan, sikap dan ketrampilan pada materi kelarutan dan hasil kali kelarutan; (2) ada pengaruh kemampuan berpikir kritis siswa terhadap prestasi belajar siswa aspek pengetahuan tetapi tidak ada pengaruh kemampuan berpikir kritis terhadap aspek sikap dan ketrampilan pada materi kelarutan dan hasil kali kelarutan; (3) tidak ada interaksi antara penerapan model pembelajaran CC dan inkuiri terbimbing berdasarkan representasi tetrahedral kimia dengan kemampuan berpikir kritis terhadap prestasi belajar aspek pengetahuan, sikap, dan ketrampilan pada materi kelarutan dan hasil kali kelarutan.

**Kata kunci** : *Constructive Controversy* (CC), Inkuiri terbimbing, Kemampuan Berpikir Kritis, Kelarutan dan Hasil Kali Kelarutan, Representasi Tetrahedral Kimia.

## ABSTRACT

Siti Khoirun Annisak. **THE INFLUENCE OF IMPLEMENTING CONSTRUCTIVE CONTROVERSY AND GUIDED INQUIRY LEARNING MODEL CORRESPONDING TO THE CHEMICAL TETRAHEDRAL REPRESENTATION TOWARDS CHEMICAL LEARNING ACHIEVEMENT VIEWED FROM CRITICAL THINKING ABILITY (Chemistry Learning In Solubility and Solubility Product Constant Subject Matter).** Undergraduate Thesis, Faculty of Teacher Training and Education. Sebelas Maret University. July 2018.

Chemical subject matter solubility and solubility product constant is one of the materials that are difficult, so it needed critical thinking ability. Learning innovation to improve critical thinking skills is very important. This research aimed to determine: (1) the influence of implementing Constructive Controversy (CC) and guided inquiry learning model based on chemical tetrahedral representation towards students achievement on solubility and solubility product constant subject matter; (2) the influence of the student's critical thinking ability towards students achievement on solubility and solubility product constant subject matter; (3) interaction between implementing CC and guided inquiry learning model based on chemical tetrahedral representation with critical thinking ability towards students achievement on solubility and solubility product constant subject matter.

This research used quasi experiment method with factorial design of 2x2. Sample of the research was students in class XI MIA 2 and XI MIA 4 SMA Negeri 1 Sragen, selected through cluster random sampling technique. The techniques of collection data used (1) test to know students critical thinking ability and academic achievement of knowledge aspect; (2) questionnaire to know students attitude aspect; (3) observation to know the students attitude, skill aspect, and implementing of chemical tetrahedral. The technique of analysis data used parametric statistical test of ANOVA and non parametric test Kruskal Wallis with the help of SPSS 20 software.

The result showed that: (1) there was no influence of implementing CC and guided inquiry learning model based on chemical tetrahedral representation towards students achievement of knowledge, attitude, and skill aspect on solubility and solubility product constant subject matter; (2) there was influence of the student's critical thinking ability towards student's achievement of knowledge aspect but there was no influence of critical thinking ability toward student's achievement of attitude and skill aspect on solubility and solubility product constant subject matter; (3) there was no interaction between implementing CC and guided inquiry learning model based on chemical tetrahedral representation with critical thinking ability towards students achievement of knowledge, attitude, and skill aspect on solubility and solubility product constant subject matter.

**Keywords :** *Constructive Controversy (CC), Guided Inquiry, Critical Thinking Ability, Solubility and Solubility product Constant (Ksp), Chemical Tetrahedral Representation.*